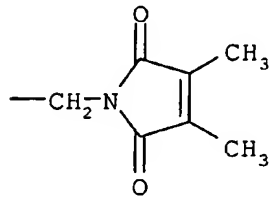
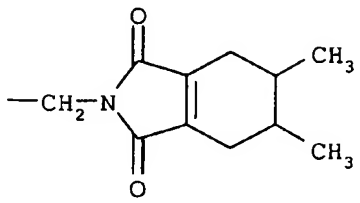
[CLAIMS]

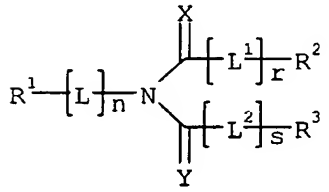
1. A polymer comprising a phenolic monomeric unit of which the phenyl group is substituted by a group A characterised in that the group A comprises an imide or thioimide group, with the exception that A is not



or



2. A polymer according to claim 1 wherein the group A has the following formula



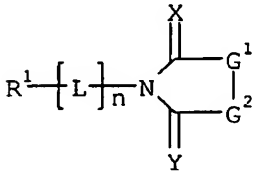
wherein X and Y are independently selected from O or S,

wherein L, L^1 and L^2 are independently a linking group,

wherein n, r and s are independently 0 or 1,

and wherein one of the groups R^1, R^2 or R^3 represents the phenolic monomeric unit and the other two represent a terminal group.

3. A polymer according to claim 1 wherein the group A has the following formula



wherein X and Y are independently selected from O or S,

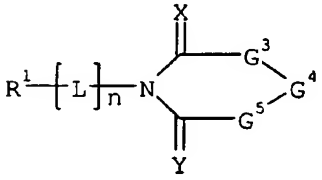
wherein G^1 and G^2 are independently selected from O, S, NR^4 or $R^5-[L^3]_t-C-[L^4]_u-R^6$, with the limitation that G^1 is not O or S when G^2 is O and that G^1 is not O or S when G^2 is NR^4,

wherein L, L^3 and L^4 are independently a linking group,

wherein n, t and u are independently 0 or 1,

and wherein one of the groups selected from R^1, R^4, R^5 or R^6 represents the phenolic monomeric unit and the remaining groups represent a terminal group.

4. A polymer according to claim 1 wherein the group A has the following formula



wherein X and Y are independently selected from O or S,

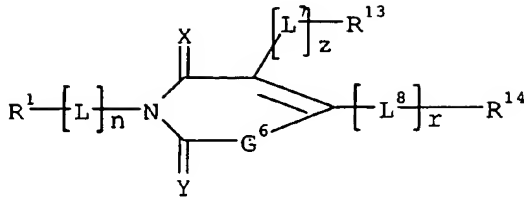
wherein G^3 to G^5 are independently selected from O, S, NR^7 or $R^8-[L^5]_v-C-[L^6]_w-R^9$ with the limitation that at least one group, selected from G^3 to G^5, is $R^8-[L^5]_v-C-[L^6]_w-R^9$ and that two neighbouring groups, selected from G^3 to G^5, are not represented by O and S, by O and NR^7, by S and NR^7 or by O and O,

wherein L, L^5 and L^6 are independently a linking group,

wherein n, v and w are independently 0 or 1,

and wherein one of the groups selected from R^1, R^7, R^8 or R^9 represents the phenolic monomeric unit and the remaining groups represent a terminal group.

5. A polymer according to claim 1 wherein the group A has the following formula



wherein X and Y are independently selected from O or S,

wherein G^6 is a group selected from O, S, NR^{10} or

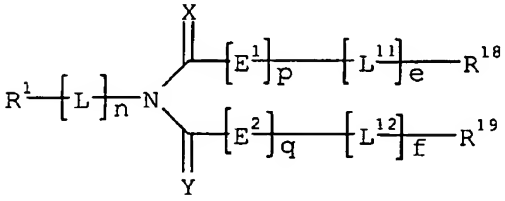
$R^{11}-[L^9]_x-C-[L^{10}]_y-R^{12}$,

wherein L, L^7, L^8, L^9 and L^{10} are independently a linking group,

wherein n, x, y, z and r are independently 0 or 1,

and wherein one of the groups selected from R^1, R^{10}, R^{11}, R^{12}, R^{13} and R^{14} represents the phenolic monomeric unit and the remaining groups represent a terminal group.

6. A polymer according to claim 1 wherein the group A has the following formula



wherein X and Y are independently selected from O or S,

wherein E^1 and E^2 are independently selected from O, S, NR^{15} or

$R^{16}-[L^{13}]_g-C-[L^{14}]_h-R^{17}$,

wherein n, e, f, g, h, p and q are independently 0 or 1,

wherein e is 0 when E^1 is represented by O, S or NR^{15},

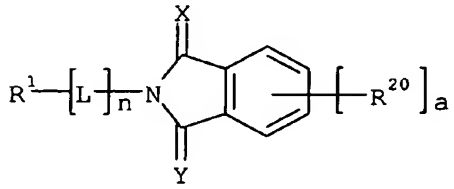
wherein f is 0 when and E^2 is represented by O, S or NR^{15},

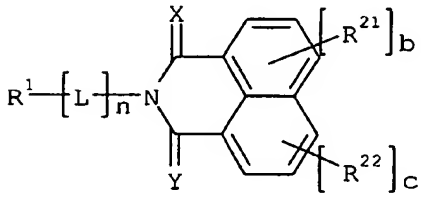
wherein L, L^{11}, L^{12}, L^{13} and L^{14} are independently a linking group,

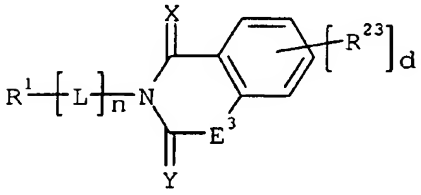
and wherein one of the groups selected from R^1, R^{15}, R^{16}, R^{17}, R^{18}

and R^{19} represents the phenolic monomeric unit and the remaining groups represent a terminal group.

7. A polymer according to claim 1 wherein the group A has one of the following formula







wherein X and Y are independently selected from O or S,

wherein each R^1, R^{20} to R^{23} are a terminal group, independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, $-SO_2-NH-R^{24}$, $-NH-SO_2-R^{27}$, $-CO-NR^{24}-R^{25}$, $-NR^{24}-CO-R^{27}$, $-NR^{24}-CO-NR^{25}-R^{26}$, $-NR^{24}-CS-NR^{25}-R^{26}$, $-NR^{24}-CO-O-R^{25}$, $-O-CO-NR^{24}-R^{25}$, $-O-CO-R^{27}$, $-CO-O-R^{24}$, $-CO-R^{24}$, $-SO_3-R^{24}$, $-O-SO_2-R^{27}$, $-SO_2-R^{24}$, $-SO-R^{27}$, $-P(=O)(-O-R^{24})(-O-R^{25})$, $-O-P(=O)(-O-R^{24})(-O-R^{25})$, $-NR^{24}-R^{25}$, $-O-R^{24}$, $-S-R^{24}$, $-CN$, $-NO_2$, $-N(-CO-R^{24})(-CO-R^{25})$, -N-phthalimidyl, -M-N-phthalimidyl, or $-M-R^{24}$, wherein M represents a divalent linking group containing 1

to 8 carbon atoms,
wherein R^{24} to R^{26} are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
wherein R^{27} is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
wherein a and d are independently 0, 1, 2, 3 or 4,
wherein b and c are independently 0, 1, 2 or 3,
wherein E^3 is selected from O, S, NR^{28} or R^{29}-$[L^{15}]_i$-C-$[L^{16}]_j$-R^{30},
wherein L, L^{15} and L^{16} are independently a linking group,
wherein n, i and j independently are 0 or 1,
and wherein one of the groups selected from R^1, R^{20}, R^{21}, R^{22}, R^{23}, R^{28}, R^{29} and R^{30} represents the phenolic monomeric unit and the remaining groups represent a terminal group.

8. A polymer according to any of the preceding claims, wherein said polymer comprising a phenolic monomeric unit is a novolac, resol or polyvinylphenol.

9. A heat-sensitive lithographic printing plate precursor comprising a support having a hydrophilic surface and an oleophilic coating, provided on the hydrophilic surface, said coating comprising an infrared light absorbing agent and a polymer according to any of the preceding claims.

10. A lithographic printing plate precursor according to claim 9, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

11. A lithographic printing plate precursor according to claim 10, wherein said dissolution inhibitor is selected from

- an organic compound which comprises at least one aromatic group and a hydrogen bonding site, and/or
- a polymer or surfactant comprising siloxane or perfluoroalkyl units.

12. Use of a polymer, according to any of the claims 1 to 8, in a coating of a positive working heat-sensitive lithographic printing plate precursor, further comprising

- an infrared absorbing agent and
- a dissolution inhibitor,

for increasing the chemical resistance of the coating against printing liquids and press chemicals.

13. A lithographic printing plate precursor according to claim 9, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precusor.

14. Use of a polymer, according to any of the claims 1 to 8, in a coating of a negative working heat-sensitive lithographic printing plate precursor, further comprising

- an infrared absorbing agent,
- a latent Brönsted acid and
- an acid-crosslinkable compound,

for increasing the chemical resistance of the coating against printing liquids and press chemicals.